

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 06/16/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/601,162 06/20/2003		Jeff Moler	VTE-137-B	7528	
7590 06/16/2004			EXAMINER		
Thomas D. He		ADDISON, KAREN B			
Young & Basile	e, P.C.	ART UNIT	PAPER NUMBER		
Suite 624			AKI ONII	PAPER NUMBER	
3001 West Big Beaver Road			2834		
Trov. MI 4808	R4				

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	tion No.	Applicant(s)				
		10/601,	162 <b>(</b> )	MOLER, JEFF				
	Office Action Summary	Examin	er	Art Unit				
, · · · · ·			Addison	2834				
? Period for F	The MAILING DATE of this commun Reply	ication appears on t	he cover she t with	the correspondence a	ddress			
THE MA - Extensio after SIX - If the per - If NO per - Failure to Any reply	RTENED STATUTORY PERIOD F NILING DATE OF THIS COMMUNI ns of time may be available under the provisions (6) MONTHS from the mailing date of this commind for reply specified above is less than thirty (3) riod for reply is specified above, the maximum state of reply within the set or extended period for reply to reply within the set or extended period for reply to received by the Office later than three months a atent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no ensuring the state of t	event, however, may a rep atutory minimum of thirty ( will expire SIX (6) MONTh oplication to become ABAI	ly be timely filed (30) days will be considered time (35) from the mailing date of this (35) U.S.C. § 133).				
Status	`							
1)□ Re	esponsive to communication(s) file	ed on .						
· —		2b)⊠ This action is	non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition	of Claims							
4a 5)□ Cl 6)⊠ Cl 7)□ Cl	4)  Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-9 and 11-22 is/are rejected.  7)  Claim(s) 10 and 23 is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.							
Application	Papers							
9)[ Th	e specification is objected to by the	e Examiner.						
10)□ Th	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Ар	plicant may not request that any object	ction to the drawing(s)	be held in abeyance	e. See 37 CFR 1.85(a).				
	eplacement drawing sheet(s) including e oath or declaration is objected to	·	-, .	•	, ,			
Priority und	ler 35 U.S.C. § 119							
a)⊠ <i>i</i> 1.[ 2.[ 3.[	knowledgment is made of a claim  All b) Some * c) None of:  Certified copies of the priority  Certified copies of the priority  Copies of the certified copies of application from the Internation the attached detailed Office action	documents have be documents have be of the priority docun nal Bureau (PCT Ru	en received. en received in App nents have been re ule 17.2(a)).	olication No eceived in this Nationa	l Stage			
Amadana 41 h								
Attachment(s)  1) Notice of	References Cited (PTO-892)		4) Interview Sur	nmary (PTO-413)				
2) 🔲 Notice of	Draftsperson's Patent Drawing Review (P		Paper No(s)/I	Mail Date				
	on Disclosure Statement(s) (PTO-1449 or o(s)/Mail Date	PTO/SB/08)	5) Notice of Info	rmal Patent Application (PT	O-152)			

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-9,11-16, and 18-22 rejected under 35 U.S.C. 102(b) as being anticipated by Ota (JP 6-105568).

Ota discloses in fig. 2,3,6,7 a uni-body actuator comprising: a support structure(4) having a first and a second arm portions(45,53) formed on an outer end of each arm portion for movement therewith; and a primary actuator (a)operable associated with the support structure for driving the arm portions relative to one another in response to an electrical activation of the primary actuator, and a secondary actuator(c) operable associate with each secondary portion for driving each secondary portion between an opened position and a closed position in response to an electrical activation of the secondary actuator, each of the actuators being operable independently of one another. Ota also discloses, a rigid non-flexing web portion (beneath 24 and 42) associated with the support structure and a force transfer member(44) for transmitting a force from the primary actuator to move the associated secondary portion between an extended position and a retracted position with respect to one another, the secondary portions moving toward one another to the retracted position wherein, the primary actuator is de-energized and the secondary portions moving away form one another to

Art Unit: 2834

the extended position when the primary actuator is energized. Wherein, the rigid nonflexing web portion associated with outward extending side portion at opposite ends of the web portion defining a rigid non-flexing C-shape portion of the support structure; and a pair of hinge portions (42) extending generally parallel to one another between the force transfer member portion and each arm portion of the support structure, and between the force transfer member portion and each side portion of the support structure. Ota also disclose a secondary web portion (beneath 44) integrally associated with the corresponding arm portion of the support structure; and the first and second secondary arm portions integrally associated with and extending from opposite ends of each secondary web portion. Wherein, a force transfer member portion for transmitting a force from the secondary actuator to move the associated secondary arm portion between an opened position and a closed position with respect to one another, the secondary arm portions moving toward one another to the closed position when the secondary actuator is de-energized and the secondary arm portion moving away from one another to the open position when the secondary actuator is energized. Ota also discloses each of the secondary portions having a clamp (47,55) having shape recesses(54) engageable with a movable member having a complementary shape. Wherein, the primary and secondary actuators can be triggered in different sequential series for bi-directional operation to move the member in either direction with respect to the structure. Ota also show a first and a second pair of substantially parallel hinges for the first and second clamps to pivot about respectively formed by at least one reduced area created by slots located in the support structure between each clamp and each

Application/Control Number: 10/601,162 Page 4

Art Unit: 2834

side of the structure, and between the force transfer member and the clamps. Wherein, the force focusing member operable associated with one of the primary and secondary actuators; and a screw (m) threadaly engagable with a rigid end web of the support structure, the screw operably associated with the force focusing member such that a preload force can be applied to the actuator through the screw and the force focusing member prior to energizing the actuator. The method is inherent based on the structural limitations of the claims.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota.

  Ota substantially disclose the claim invention however, Ota does not discloses the support structure made of homogenous material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a homogenous material for the support structure, since it has been held to be within the general skill of a worker in the art to select a know material of the basis of it's suitability for the intended use as a matter of obvious design choice. IN re Leshin,125 USPQ416.

# Allowable Subject Matter

5. Claims 10 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art fails to show the secondary portions defining a fist valve portion and a second valve portion; an a pump means for pumping a fluid, the pump means positioned between the first and second arm portions of the support structure and in fluid communication with the first valve portion and the second valve portion.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 571-272-2017. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/601,162

Art Unit: 2834

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBA 6/6/04

THOMAS M. DOUGHERTY
PRIMARY EXAMINER
OROUP 2400